

What is claimed is:

1. A device for closing a defect in septal tissue, comprising:
a first side adapted to be disposed on one side of the septal tissue and a second
side adapted to be disposed on the opposite side of the septal tissue, said first and second
5 sides connected by at least one center joint,
wherein each of said first and second sides includes an anchor member, and
wherein the anchor member of at least one of said first and second sides
comprises a generally cylindrical member split along the central portion of its length to
form an elongate oval.
- 10 2. The device of Claim 1, wherein said at least one center joint extends through the
defect in the septal tissue when said device is deployed at its intended delivery location.
3. The device of Claim 2, wherein said first and second sides cooperate to provide a
compressive force to the septal tissue surrounding the defect.
4. The device of Claim 1, wherein each of said first and second sides comprises a
15 generally cylindrical member split along the central portion of its length to form an
elongate oval.
5. The device of Claim 4, wherein said first and second anchor members are three-
dimensional.
6. The device of Claim 1, wherein said anchor members include a material selected
20 from the group consisting of metals, polymers, shape memory materials, bioresorbable
materials, drug-exuding materials, and combinations of the foregoing materials.
7. The device of Claim 1, wherein said at least one center joint includes a stretchable
elastomeric material.
8. The device of Claim 7, wherein said at least one center joint includes a shape
25 memory material.
9. The device of Claim 8, wherein said at least one center joint includes nitinol.

10. The device of Claim 9, wherein said at least one center joint comprises a nitinol film.
11. The device of Claim 10, wherein said nitinol film includes openings selected from the group consisting of slits and holes.
- 5 12. The device of Claim 7, wherein said at least one center joint includes a material that promotes closure of the defect in the septal tissue.
13. The device of Claim 12, wherein said at least one center joint includes a material selected from the group consisting of thrombogenic materials, inflammatory materials, drug-exuding materials, and combinations of the foregoing materials.
- 10 14. The device of Claim 7, wherein said at least one center joint is porous.
15. The device of Claim 1, wherein at least one of said first and second anchor members includes a tissue scaffold.
16. The device of Claim 15, wherein said tissue scaffold includes a material selected from the group consisting of polyester fabrics, Teflon-based materials, ePTFE,
- 15 polyurethanes, metallic materials, polyvinyl alcohol (PVA), extracellular matrix (ECM), synthetic bioabsorbable polymeric scaffolds, collagen, drug-exuding materials, and combinations of the foregoing materials.
17. The device of Claim 15, wherein each of said first and second anchor members includes a tissue scaffold.
- 20 18. The device of Claim 17, wherein said at least one center joint is connected to said tissue scaffolds.
19. The device of Claim 1, wherein said device is retrievable.
20. A device for closing a defect in septal tissue, comprising:

a first side adapted to be disposed on one side of the septal tissue and a second side adapted to be disposed on the opposite side of the septal tissue, said first and second sides connected by a at least one center joint,

wherein each of said first and second sides includes an anchor member
5 comprising a generally cylindrical member split along the central portion of its length to form an elongate oval, and

wherein said first and second sides cooperate to provide a compressive force to the septal tissue surrounding the defect when said device is deployed at an intended delivery location.

10 21. The device of Claim 20, wherein said anchor members include a material selected from the group consisting of metals, polymers, shape memory materials, bioresorbable materials, drug-exuding materials, and combinations of the foregoing materials.

22. The device of Claim 21, wherein each of said elongate oval anchor members is three-dimensional.

15 23. The device of Claim 22, wherein each of said elongate oval anchor members is configured to minimize the septal profile of said device.

24. The device of Claim 23, wherein the arcs of said elongate oval anchor members are positioned at an angle θ from the plane of said device.

20 25. The device of claim 24, wherein each of said elongate oval anchor members is concave in shape.

26. The device of Claim 24, wherein said angle θ is greater than 0 degrees and less than about 45 degrees.

27. The device of Claim 20, wherein each of said first and second anchor members includes a tissue scaffold.

25 28. The device of Claim 27, wherein said tissue scaffold includes a material selected from the group consisting of polyester fabrics, Teflon-based materials, ePTFE,

polyurethanes, metallic materials, polyvinyl alcohol (PVA), extracellular matrix (ECM), synthetic bioabsorbable polymeric scaffolds, collagen, drug-exuding materials, and combinations of the foregoing materials.

29. The device of Claim 20, wherein said at least one center joint includes a stretchable elastomeric material.

30. The device of Claim 29, wherein said at least one center joint includes a shape memory material.

31. The device of Claim 30, wherein said at least one center joint includes nitinol.

32. The device of Claim 29, wherein said at least one center joint includes a material that promotes closure of the defect in the septal tissue.

33. The device of Claim 32, wherein said at least one center joint includes a material selected from the group consisting of thrombogenic materials, inflammatory materials, drug-exuding materials, and combinations of the foregoing materials.

34. The device of Claim 20, further comprising a retrieval mechanism for retrieving said device from its intended delivery location.

35. The device of Claim 34, wherein said retrieval mechanism reduces the profile of said device such that said device may drawn into a catheter.

36. The device of Claim 35, wherein said retrieval mechanism reduces the distance between said first and second anchor members and aligns said first and second anchor members in a longitudinal orientation.

37. The device of Claim 35, wherein said retrieval mechanism comprises
a string extending from one end of said first anchor member to and through said second anchor member, and
a ball constrained on said string within said second anchor member.

38. The device of Claim 37, wherein said string is flexible.